

Work Order ID 84700

\*84700\*

Page 1

May-22-12 1:03:28 PM

Item ID: D3049-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Bearpaw

Start Date: 22/05/2012 Start Qty: 8.00

\*8\*

Cust Item ID:

Required Date: 05/06/2012 Req'd Qty: 8.00

\*8\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/05/22

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr                       | Revision Nbr             |                      |         |        |              |               |               |                  |                |
| D3049                          | Rev A1                   |                      |         |        |              | 8             |               | 32               |                |

110

0.00

\*110\*

Waterjet

Memo

0.00

FLOW CNC Waterjet

CUT BLANK AS PER FILE D3049-1 \_BLANK

R12-6-2

120

0.00

\*120\*

HAAS 1

HAAS CNC VERTICAL MACHINING #1

Memo

0.00

HAAS CNC vertical machine #1

1-Inspect material for defects or damage prior to machining  
2-Machine as per Folio FA165 and Dwg D3049 Identify as D3049-1  
3-Deburr

P0/B.A

12/07/06

8

0

R12-6-2

130

QC2- Inspect parts off machine FAI/FAIB

0.00

\*130\*

QC

Memo

0.00

Quality Control

P0/B.A

12/07/06

8

0

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Work Order ID 84700

May-22-12 1:03:28 PM

**\*84700\***

Page 2

Item ID: D3049-1

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Bearpaw

Stop **\*NS2\***

Start Date: 22/05/2012 Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 05/06/2012 Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

140 QC8- Inspect parts - second check

0.00

*P.7 / 12/07/10*

**\*140\***

QC Memo

0.00

Quality Control

170 Identify as per dwg & Stock Location: \_\_\_\_\_

0.00

**\*170\***

Packaging Memo *PMP84689*

0.00

Packaging

*P.7 / 12/7/10*

180 QC21- Final Inspection - Work Order Release

0.00

**\*180\***

QC Memo

0.00

Quality Control

*CK 12/7/10*

*MF 12-07-10*

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

May-22-12 1:03:32 PM

Page 1

Work Order ID: 84700

\*84700\*

Parent Item: D3049-1

\*D3049-1\*

Parent Item Name: Bearpaw

Start Date: 22/05/2012

Required Date: 05/06/2012

Start Qty: 8.00

Required Qty: 8.00

## Comments:

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| MUHMWB10                        |                        | Purchased     | No          |                     |                  | 120             | sf                 | 53.2100        | 3.4         | 27.2         | 35            |                |        |
| *MUHMWB10*                      |                        |               |             |                     |                  |                 |                    |                | **          |              |               |                |        |
| UHMW 1" Black                   |                        |               |             |                     |                  |                 |                    |                |             |              |               |                |        |

B12-C-2

Location Loc Qty Loc Code

MAT018 30.1

120972 3

121346 27.1

MAT019 1.5

118814 1.5

ST052 21.60999474

121277 12.8

121278 8.80999474

121851

121851

8

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

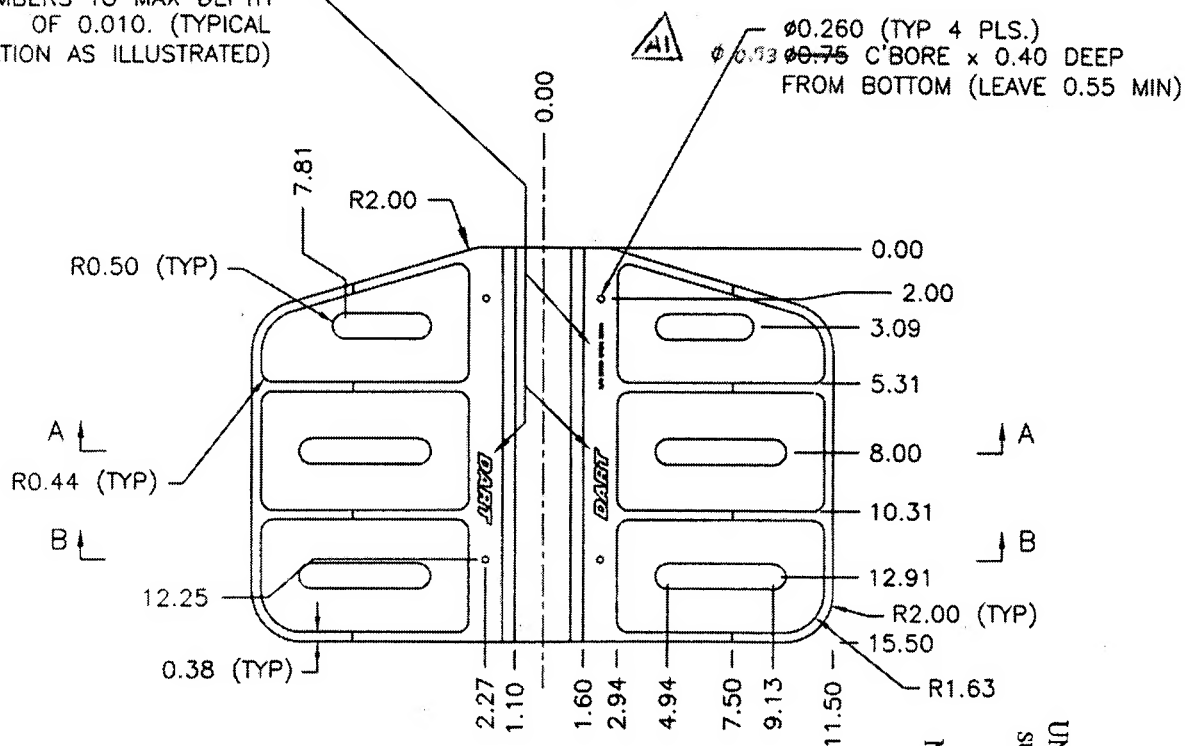
**NOTE:** Date & initial all entries



|                        |                         |   |                        |
|------------------------|-------------------------|---|------------------------|
| DESIGN<br>RF           | DRAWN BY<br>RF          | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>[Signature] | APPROVED<br>[Signature] | DRAWING NO.<br>D3049                              | REV. A<br>SHEET 1 OF 2 |
| DATE<br>01 10.18       |                         | TITLE<br>BEARPAW                                  | SCALE<br>1:1           |
| A                      | 01.10.18                | NEW ISSUE   |                        |
| AI                     | [Signature] 03.01.13    | $\phi 0.93$ WAS $\phi 0.75$                       |                        |

RELEASED  
01.10.24 [Signature]

ENGRAVE DART LOGO TO  
MAX DEPTH OF 0.012.  
ENGRAVE PART AND BATCH  
NUMBERS TO MAX DEPTH  
OF 0.010. (TYPICAL  
LOCATION AS ILLUSTRATED)



D3049-1 BEARPAW

NOTES:

- 1) BEARPAW IS SYMMETRIC ABOUT CENTER LINE
- 2) MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689  
1.00" THICK (MACHINE TO 0.950)

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 84700 M/L5  
12/05/22

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| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

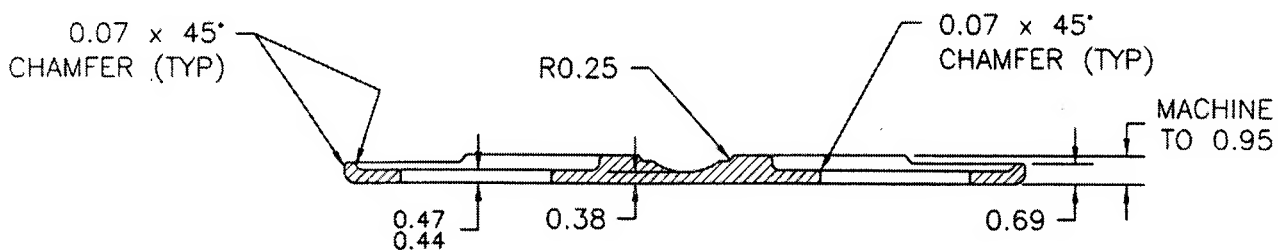
**NOTE:** Date & initial all entries



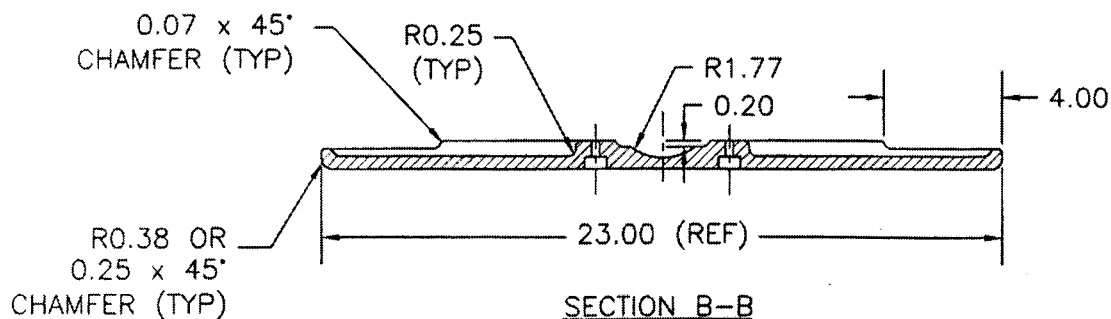


|                               |                                |   |                        |
|-------------------------------|--------------------------------|---|------------------------|
| DESIGN<br>RF                  | DRAWN BY<br>RF                 | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> | DRAWING NO.<br>D3049                              | REV. A<br>SHEET 2 OF 2 |
| DATE<br>01.10.18              |                                | TITLE<br>BEARPAW                                  | SCALE<br>1:6           |

RELEASED  
01.10.24 *[Signature]*



SECTION A-A



SECTION B-B

*2018*

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|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

|   |  |                     |                |
|---|--|---------------------|----------------|
| <b>DART AEROSPACE LTD</b>                   |  | <b>Work Order:</b>  |                |
| <b>Description:</b> Bearpaw                 |  | <b>Part Number:</b> | <b>D3049-1</b> |
| <b>Inspection Dwg:</b> D3049 <b>Rev:</b> A1 |  | <b>Page 1 of 1</b>  |                |

### FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article**
                         
 ☐ **Prototype**

| Inspection Sheet<br>Drawing Dimension |             | Tolerance     | Actual<br>Dimension | Accept | Reject | Method of<br>Inspection | Comments |
|---------------------------------------|-------------|---------------|---------------------|--------|--------|-------------------------|----------|
| A                                     | Ø0.260      | +0.005/-0.000 | 0.260               | ✓      |        | VERN                    | PHD-01   |
| B                                     | 0.93        | +/-0.030      | 0.931               | ✓      |        | "                       | "        |
| C                                     | 0.40        | +0.030/-0.000 | 0.403               | ✓      |        | Mic                     | PHD-09   |
| D                                     | 2.00        | +/-0.030      | 2.002               | ✓      |        | VERN                    | PHD-01   |
| E                                     | 10.250      | +/-0.010      | 10.250              | ✓      |        | H gauge                 |          |
| F                                     | 4.540       | +/-0.030      | 4.540               | ✓      |        | VERN                    | PHD-01   |
| G                                     | 5.88        | +/-0.030      | 5.875               | ✓      |        | "                       | "        |
| H                                     | 0.38        | +/-0.030      | 0.378               | ✓      |        | "                       | "        |
| I                                     | 11.50       | +/-0.030      | 11.500              | ✓      |        | M TAPE                  | PHD-11   |
| J                                     | 0.07 x 45°  | +0.030/-0.010 | 0.060               | ✓      |        | VERN                    | PHD-01   |
| K                                     | 0.44 - 0.47 | +/-0.000      | 0.453               | ✓      |        | Mic                     | 118-120  |
| L                                     | R0.25       | +/-0.030      | 0.250               | ✓      |        | Rad gauge               |          |
| M                                     | 0.38        | +/-0.010      | 0.376               | ✓      |        | M.C                     | 118-120  |
| N                                     | 0.95        | +0.030/-0.010 | 0.953               | ✓      |        | VERN                    | PHD-01   |
| O                                     | 0.69        | +/-0.030      | 0.690               | ✓      |        | "                       | "        |
| P                                     | 0.20        | +/-0.030      | 0.195               | ✓      |        | Mic                     | PHD-09   |
| Q                                     | 23.00       | +/-0.030      | 23.000              | ✓      |        | M TAPE                  | PHD-11   |
| R                                     | 0.25 x 45°  | +/-0.030      | 0.250               | ✓      |        | VERN                    | PHD-01   |
|                                       |             |               |                     |        |        |                         |          |
|                                       |             |               |                     |        |        |                         |          |
|                                       |             |               |                     |        |        |                         |          |
|                                       |             |               |                     |        |        |                         |          |

|                              |                        |                            |     |
|------------------------------|------------------------|----------------------------|-----|
| <b>Measured by:</b> JD / B.A | <b>Audited by:</b> /st | <b>Prototype Approval:</b> | N/A |
| <b>Date:</b> 12/07/06        | <b>Date:</b> 12/07/06  | <b>Date:</b>               | N/A |

| Rev | Date     | Change                          | Revised by | Approved |
|-----|----------|---------------------------------|------------|----------|
| A   | 03.09.22 | New Issue      P/O D135-692-011 | KJ/RF      |          |
| B   | 08.05.06 | Dimension I revised             | KJ/DD      |          |